# Soils Inventory Report

### NC CORRECTION ENTERPRISE FARMS

Tract	Land Unit	Map Unit Symbol	Acres	Percent
3304		CbA	6.3	1%
3304		AaA	38.1	8%
3304		StA	76.8	15%
3304		CwA	85.5	17%
3304		StB	296.7	59%
		Total:	503.4	100%
3304	80	CwA	3.7	14%
3304	80	StA	4.9	19%
3304	80	StB	17.2	67%
· ·		Total:	25.8	100%
3304	. 147	AaA	3.9	16%
3304	147	CwA	8.6	35%
3304	147	StB	12.3	50%
, . • • • • • • • • • • • • • • • • • •		Total:	24.8	100%
3304	164	CwA	1.4	4%
3304	164	AaA	3.9	11%
3304	164	StB	14.3	40%
3304	164	StA	16.6	46%
		Total:	36.2	100%
3304	172	AaA	0.9	7%
3304	172	StB	12.5	93%
		Total:	13.4	100%
3304	189	StA	0.4	1%
3304	189	CwA	6.4	20%
3304	189	StB	24.7	78%
	<u> </u>	Total:	31.5	100%
3304	190	AaA	1.6	9%

3304	190	CbA	2	11%
3304	190	CwA	3.3	19%
3304	190	StA	3.7	21%
3304	190	StB	7.1	40%
	•	Total:	17.7.	100%
3304	192	CbA	0.1	1%
3304	192	AaA	2.4	13%
3304	192	CwA	5.1	28%
3304	192	StB	10.8	59%
•		Total:	18.4	100%
		Total:	671.2	100%

```
NCANAT Version: 2.04
Comparision Results : BEFORE
```

NLEW Results For: Halifax 4/9/2012 4:28:29 PM

INPUTS

Calendar Year: 2012 County: Halifax

Producer Identifier: Caledonia Prison Farm

Tract Number: 3302-A Field Number:

Soil Series: StB: State fine sandy loam, 2 to 6 percent slopes

Field Acres: 16.1 Field Slope: 3

Crop: Fescue (Hay) :

Fescue (Hay) NUE: 0.75 3.92 RYE (Database): NFactor (Database): 44

N Application Rate: 110 lbs/Acre Recommended N App Rate: 172.48 lbs/Acre

#### OUTPUTS

N\_Applied (Field Acres) =
N\_Needed (Field Acres) = 1,771 lbs 2,776.93 lbs

\*\*\* N Applied (1771) <= N Needed (2776.93)

\*\*\* Changing N Needed to N Applied...

\*\*\* N Applied = 1,771 lbs

Excess N (Field Acres) = 0 lbs Excess N Surface = 0 lbs 0 lbs Excess\_N\_Subsurface = · 1,771 lbs 1,328.25 lbs 442.75 lbs N Needed Field = Utilized N Crop = N Lost After Crop =

N Lost Before BMP = 442.75 lbs N\_Lost\_After\_Cover\_Crops = 442.75 lbs

442.75 lbs Total N Lost =

PLAT Results For: Halifax 4/9/2012 4:28:29 PM

#### INPUTS

Calendar Year: 2012 Halifax County:

Producer Identifier: Caledonia Prison Farm

Tract Number: 3302-A Field Number:

StB: State fine sandy loam, 2 to 6 percent slopes Soil Series:

Fescue (Hay) : Crop:

Fertilizers: Layer-Lagoon liquid

Yearly Applied Amount: 0.75 ac in Lb P205: 46.34 lb

Application Method: All other surface

applications Soil Loss:

0.12 t/ac/yrReceiving Slope Distance 20-29 ft

```
Hydrologic Condition:
                               GOOD
                               OUTPUTS
PARTICULATE P =
                       0
SOLUBLE P
LEACHATE P
SOURCE P
                       0
TOTAL P RATING =
                       2 (LOW)
Comparision Results : AFTER
NLEW Results For: Halifax
                             4/9/2012 4:28:29 PM
                              INPUTS
Calendar Year:
                              2012
County:
                              Halifax
Producer Identifier:
                              Caledonia Prison Farm
Tract Number:
                              3302-A
Field Number:
                              36
Soil Series:
                              StB: State fine sandy loam, 2 to 6 percent slopes
Field Acres:
                              12.1
Field Slope:
                              3
Crop:
                              Fescue (Hay) :
Fescue (Hay) NUE:
                              0.75
RYE (Database):
                              3.92
NFactor (Database):
                              44
                              110 lbs/Acre
N Application Rate:
Recommended N App Rate:
                              172.48 lbs/Acre
BMPs:
                              Buffer Width
                                            Width = 30 ft.
BMP Acres Affected:
                              OUTPUTS
N Applied (Field Acres) =
                                 1,331 lbs
N_Needed (Field Acres) =
                                2,087.01 lbs
    *** N Applied (1331) <= N Needed (2087.01)
    *** Changing N Needed to N Applied...
    *** N Applied =
                                          1,331 lbs
Excess N (Field Acres) =
                                 0 lbs
Excess N Surface =
                                 0 lbs
Excess_N_Subsurface =
                                 0 lbs
N Needed Field =
                                 1,331 lbs
Utilized N Crop =
                                 998.25 lbs
N Lost After Crop =
                                 332.75 lbs
N Lost Before BMP =
                                 332.75 lbs
N_Lost_After_Cover_Crops =
                                 332.75 lbs
N Lost After BMP =
                                 288.75 lbs
                                 288.75 lbs
Total N Lost =
```

140

1

Soil Test 0" - 4"

WV\_Factor (USER)

```
PLAT Results For: Halifax 4/9 J12 4:28:29 PM
```

Sediment (Before) = 1.45 Sediment (After) = 1.45

ADDITION = 0 t/yr/field

INPUTS Calendar Year: 2012 County: Halifax Producer Identifier: Caledonia Prison Farm Tract Number: 3302-A Field Number: 36 Soil Series: StB: State fine sandy loam, 2 to 6 percent slopes Crop: Fescue (Hay) : BMPs: Buffer Width Width = 30 ft.Layer-Lagoon liquid Fertilizers: Yearly Applied Amount: 0.75 ac in 46.34 lb Lb P205: Application Method: All other surface applications 0.12 t/ac/yr Soil Loss: Receiving Slope Distance 20-29 ft Soil Test 0" - 4" 148 WV Factor (USER) 1 Hydrologic Condition: GOOD OUTPUTS PARTICULATE P SOLUBLE P 2 LEACHATE P 0 SOURCE P TOTAL P RATING = 2 (LOW) \*\*\*\*\*\*\*\*\*\*\*\*\*\* NITROGEN REDUCTIONS/ADDITIONS Total N Lost (Before) = 442.75 Total N Lost (After) = 288.75 REDUCTION = 154 lbs N/yr/field PHOSPHOROUS REDUCTIONS/ADDITIONS Particulate P (Before) = 0.13 Particulate P (After) = 0.04 REDUCTION = 0.09 lbs P/yr/field SEDIMENT REDUCTIONS/ADDITIONS

```
NCANAT Version: 2.04
Comparision Results : BEFORE
NLEW Results For: Halifax
                             4/9/2012 4:56:31 PM
                              INPUTS
Calendar Year:
                              2012
County:
                              Halifax
Producer Identifier:
                              Caledonia Prison Farm
Tract Number:
                              3302-A
Field Number:
                              40
Soil Series:
                              StA: State fine sandy loam, 0 to 2 percent slopes
Field Acres:
                              15.9
Field Slope:
                              2
Crop:
                              Soybeans (Full Season - Manured) : Conservation Tillage -
minimum residue
Soybeans (Full Season - Manured) NUE:0.25
RYE (Database):
                            45
NFactor (Database):
                              3.89
N Application Rate:
                             100 lbs/Acre
Recommended N App Rate: 175.05 lbs/Acre
                              OUTPUTS
N Applied (Field Acres) =
                               1,590 lbs
N_{\text{Needed}} (Field Acres) = 2,783.29 lbs
    *** N Applied (1590) <= N Needed (2783.29)
    *** Changing N Needed to N Applied...
    *** N Applied =
                                         1,590 lbs
Excess N (Field Acres) =
                                0 lbs
Excess N Surface =
                                0 lbs
Excess N Subsurface =
                                0 lbs
N_Needed_Field =
                               1,590 lbs
Utilized N Crop =
                               397.5 lbs
N_Lost After Crop =
N_Lost Before BMP =
                                1,192.5 lbs
                                1,192.5 lbs
N_Lost After Cover Crops =
                              1,192.5 lbs
Total N Lost =
                                1,192.5 lbs
PLAT Results For: Halifax 4/9/2012 4:56:31 PM
                              INPUTS
Calendar Year:
                             2012
County:
                             Halifax
Producer Identifier:
                             Caledonia Prison Farm
Tract Number:
                             3302-A
Field Number:
                             40
Soil Series:
                             StA: State fine sandy loam, 0 to 2 percent slopes
Crop:
                            Soybeans (Full Season - Manured) : Conservation Tillage -
```

Layer-Lagoon liquid

Application Method:

Lb P205:

Yearly Applied Amount: 0.5 ac in

46.34 lb

All other surface

applications

minimum residue Fertilizers:

```
1. t/ac/yr
Boil Loss:
Receiving Slope Distance
                              26 9 ft
Soil Test 0" - 4"
                              105
  WV Factor (USER)
                              1.03
Iydrologic Condition:
                              GOOD
                               OUTPUTS
PARTICULATE P
                       2
SOLUBLE P
LEACHATE P
                       1
SOURCE P
'OTAL P RATING =
                       8 (LOW)
Comparision Results : AFTER
ILEW Results For:
                   Halifax
                              4/9/2012
                                         4:56:31 PM
                               INPUTS
Calendar Year:
                               2012
                               Halifax
County:
?roducer Identifier:
                               Caledonia Prison Farm
                               3302-A
!ract Number:
field Number:
                               40
                               StA: State fine sandy loam, 0 to 2 percent slopes
Boil Series:
                               11.9
field Acres:
                               2
ield Slope:
                               Soybeans (Full Season - Manured) : Conservation Tillage -
!rop:
minimum residue
Boybeans (Full Season - Manured) NUE: 0.25
RYE (Database):
                               45
                               3.89
IFactor (Database):
                             100 lbs/Acre
J Application Rate:
                               175.05 lbs/Acre
Recommended N App Rate:
                              Buffer Width Width = 30 ft.
3MPs:
BMP Acres Affected:
                               OUTPUTS
1 Applied (Field Acres) =
                                  1,190 lbs
                                 2,083.09 lbs
J Needed (Field Acres) =
    *** N Applied (1190) <= N Needed (2083.09)
    *** Changing N Needed to N Applied...
                                          1,190 lbs
    *** N Applied =
                                  0 lbs
Excess N (Field Acres) =
Excess N Surface =
                                  0 lbs
Excess_N_Subsurface =
                                  0 lbs
                                  1,190 lbs
Needed Field =
                                  297.5 lbs
Jtilized N_Crop =
                                  892.5 lbs
1 Lost After Crop =
                                  892.5 lbs
1 Lost Before BMP =
                                  892.5 lbs
1 Lost After Cover Crops =
1 Lost After BMP =
                                  772.5 lbs
```

```
72.5 lbs
Total_N_Lost =
PLAT Results For: Halifax
                              4/9/2012
                                          4:56:31 PM
                               INPUTS
Calendar Year:
                               2012
County:
                               Halifax
Producer Identifier:
                               Caledonia Prison Farm
Tract Number:
                               3302-A
Field Number:
                               40
Soil Series:
                               StA: State fine sandy loam, 0 to 2 percent slopes
                               Soybeans (Full Season - Manured) : Conservation Tillage -
Crop:
minimum residue
                               Buffer Width
                                                Width = 30 \text{ ft.}
BMPs:
                               Layer-Lagoon liquid
Fertilizers:
                                   Yearly Applied Amount:
                                                              0.5 ac in
                                   Lb P205:
                                                              46.34 lb
                                                             All other surface
                                   Application Method:
applications
Soil Loss:
                               1.6 t/ac/yr
Receiving Slope Distance
                               20-29 ft
Soil Test 0" - 4"
                               105
   WV Factor (USER)
                               1.03
Hydrologic Condition:
                               GOOD
                               OUTPUTS
PARTICULATE P
SOLUBLE P
                        0
LEACHATE P
SOURCE P
```

7 (LOW)

1192.50

772.50

REDUCTION = 420 lbs N/yr/field

PHOSPHOROUS REDUCTIONS/ADDITIONS
Particulate P (Before) = 1.15
Particulate P (After) = 0.35

REDUCTION = 0.81 lbs P/yr/field

SEDIMENT REDUCTIONS/ADDITIONS
Sediment (Before) = 19.04
Sediment (After) = 19.04

ADDITION = 0 t/yr/field

Total N Lost (Before) =

Total N Lost (After) =

TOTAL P RATING =

NCANAT Version: 2.04 Comparision Results : BEFORE NLEW Results For: Halifax 4/9/2012 4:52:42 PM INPUTS Calendar Year: 2012 Halifax County: Caledonia Prison Farm Producer Identifier: 3302-A Tract Number: 41 Field Number: Soil Series: StA: State fine sandy loam, 0 to 2 percent slopes 18.6 Field Acres: Field Slope: Soybeans (Full Season - Manured) : Conservation Tillage -Crop: minimum residue Soybeans (Full Season - Manured) NUE:0.25 RYE (Database): 45 NFactor (Database): 3.89 100 lbs/Acre N Application Rate: Recommended N App Rate: 175.05 lbs/Acre OUTPUTS N\_Applied (Field Acres) = 1,860 lbs 3,255.93 lbs N Needed (Field Acres) = \*\*\* N Applied (1860) <= N Needed (3255.93) \*\*\* Changing N Needed to N Applied... 1,860 lbs \*\*\* N Applied = 0 lbs Excess N (Field Acres) = Excess N Surface = 0 lbs 0 lbs Excess\_N\_Subsurface = 1,860 lbs N Needed Field = Utilized N Crop = 465 lbs 1,395 lbs N Lost After Crop = N\_Lost Before BMP = 1,395 lbs N Lost After Cover Crops = 1,395 lbs 1,395 lbs Total N Lost = 4/9/2012 4:52:42 PM PLAT Results For: Halifax INPUTS 2012 Calendar Year: Halifax County: Caledonia Prison Farm Producer Identifier: 3302-A Tract Number:

41

Field Number: StA: State fine sandy loam, 0 to 2 percent slopes Soil Series:

Soybeans (Full Season - Manured) : Conservation Tillage -Crop:

minimum residue

Layer-Lagoon liquid Fertilizers:

Yearly Applied Amount: 0.5 ac in 46.34 lb Lb P205:

All other surface Application Method:

applications

```
Receiving Slope Distance
                               2c _.9 ft
Soil Test 0" - 4"
                               81
  WV Factor (USER)
                               1.07
Hydrologic Condition:
                               GOOD
                               OUTPUTS
                        2
PARTICULATE P
SOLUBLE P
LEACHATE P
                        0
SOURCE P
                        1
TOTAL P RATING =
                       7 (LOW)
Comparision Results : AFTER
                                         4:52:43 PM
NLEW Results For:
                   Halifax
                              4/9/2012
                               INPUTS
Calendar Year:
                               2012
                               Halifax
County:
Producer Identifier:
                               Caledonia Prison Farm
Tract Number:
                               3302-A
Field Number:
                               41
Soil Series:
                               StA: State fine sandy loam, 0 to 2 percent slopes
                               13.9
Field Acres:
Field Slope:
                               Soybeans (Full Season - Manured) : Conservation Tillage -
Crop:
minimum residue
Soybeans (Full Season - Manured) NUE:0.25
                               45
RYE (Database):
                               3.89
NFactor (Database):
                              100 lbs/Acre
N Application Rate:
                               175.05 lbs/Acre
Recommended N App Rate:
BMPs:
                               Buffer Width
                                               Width = 30 \text{ ft.}
BMP Acres Affected:
                               4.69999980926514
                               OUTPUTS
N Applied (Field Acres) =
                                  1,390 lbs
N Needed (Field Acres) =
                                  2,433.2 lbs
    *** N Applied (1390) <= N Needed (2433.2)
    *** Changing N Needed to N Applied...
    *** N Applied =
                                           1,390 lbs
                                  0 lbs
Excess N (Field Acres) =
Excess N Surface =
                                  0 lbs
Excess_N_Subsurface =
                                  0 lbs
                                  1,390 lbs
N Needed Field =
Utilized N Crop =
                                  347.5 lbs
                                  1,042.5 lbs
N Lost After Crop =
                                  1,042.5 lbs
N Lost Before BMP =
N Lost After Cover Crops =
                                  1,042.5 lbs
N Lost After BMP =
                                  901.5 lbs
```

1 ~ t/ac/yr

Soil Loss:

```
Total N Lost =
                                 ^71.5 lbs
PLAT Results For: Halifax
                             4/9/2012
                                        4:52:43 PM
                              INPUTS
Calendar Year:
                              2012
County:
                              Halifax
Producer Identifier:
                              Caledonia Prison Farm
Tract Number:
                              3302-A
Field Number:
                              41
Soil Series:
                              StA: State fine sandy loam, 0 to 2 percent slopes
Crop:
                              Soybeans (Full Season - Manured) : Conservation Tillage -
minimum residue
BMPs:
                              Buffer Width
                                             Width = 30 ft.
Fertilizers:
                              Layer-Lagoon liquid
                                  Yearly Applied Amount:
                                                           0.5 ac in
                                  Lb P205:
                                                           46.34 lb
                                                         All other surface
                                  Application Method:
applications
Soil Loss:
                              1.7 t/ac/yr
Receiving Slope Distance
                              20-29 ft
Soil Test 0" - 4"
                            · 81
  WV Factor (USER)
                              1.07
Hydrologic Condition:
                              GOOD
                              OUTPUTS
PARTICULATE P =
                      1
SOLUBLE P
LEACHATE P
                      0
SOURCE P
                      1
FOTAL P RATING =
                       6 (LOW)
 *************
        NITROGEN REDUCTIONS/ADDITIONS
     Total N Lost (Before) =
                              1395.00
     Total N Lost (After)
                                901.50
     REDUCTION = 493.5 lbs N/yr/field
     PHOSPHOROUS REDUCTIONS/ADDITIONS
       Particulate P (Before) = 1.06
       Particulate P (After) = 0.32
      REDUCTION = 0.74 lbs P/yr/field
        SEDIMENT REDUCTIONS/ADDITIONS
           Sediment (Before) = 23.63
```

Sediment (After) = 23.63

ADDITION = 0 t/yr/field

```
NCANAT Version: 2.04
Comparision Results : BEFORE
NLEW Results For: Halifax
                              4/9/2012
                                         4:24:29 PM
                              INPUTS
Calendar Year:
                              2012
County:
                              Halifax
Producer Identifier:
                              Caledonia Prison Farm
Tract Number:
                              3302-A
Field Number:
Soil Series:
                              StB: State fine sandy loam, 2 to 6 percent slopes
Field Acres:
                              58.5
Field Slope:
Crop:
                              Fescue (Hay) :
Fescue (Hay) NUE:
                              0.75
RYE (Database):
                              3.92
NFactor (Database):
                              44
N Application Rate:
                              110 lbs/Acre
Recommended N App Rate:
                             172.48 lbs/Acre
                              OUTPUTS
N Applied (Field Acres) =
                                 6,435 lbs
                                 10,090.08 lbs
N Needed (Field Acres) =
    *** N Applied (6435) <= N Needed (10090.08)
    *** Changing N_Needed to N Applied...
    *** N Applied =
                                          6,435 lbs
Excess N (Field Acres) =
                                 0 lbs
Excess N Surface =
                                 0 lbs
Excess N Subsurface =
                                 0 lbs
N_Needed_Field =
                                 6,435 lbs
Jtilized N Crop =
                                 4,826.25 lbs
N Lost After Crop =
                                 1,608.75 lbs
N_Lost Before BMP =
                                 1,608.75 lbs
N Lost After Cover Crops =
                                 1,608.75 lbs
Fotal N Lost =
                                 1,608.75 lbs
                             4/9/2012
PLAT Results For: Halifax
                                        4:24:29 PM
                              INPUTS
Calendar Year:
                              2012
                              Halifax
County:
?roducer Identifier:
                              Caledonia Prison Farm
                             3302-A
Fract Number:
Field Number:
                              StB: State fine sandy loam, 2 to 6 percent slopes
3oil Series:
                              Fescue (Hay) :
Crop:
Fertilizers:
                              Dairy-Lagoon liquid
                                                            0.75 ac in
                                  Yearly Applied Amount:
```

Lb P205:

Application Method:

77.58 lb

All other surface

applications

Boil Loss:

Receiving Slope Distance

20-29 ft

```
WV Factor (USER)
                               1
Hydrologic Condition:
                               GOOD
                               OUTPUTS
PARTICULATE P
                        2
SOLUBLE P
LEACHATE P
SOURCE P
TOTAL P RATING =
                        3 (LOW)
Comparision Results : AFTER
NLEW Results For: Halifax
                              4/9/2012
                                         4:24:30 PM
                               INPUTS
Calendar Year:
                               2012
                               Halifax
County:
Producer Identifier:
                               Caledonia Prison Farm
                               3302-A
Tract Number:
Field Number:
                               StB: State fine sandy loam, 2 to 6 percent slopes
Soil Series:
Field Acres:
                               43.9
Field Slope:
Crop:
                               Fescue (Hay) :
                               0.75
Fescue (Hay) NUE:
                               3.92
RYE (Database):
NFactor (Database):
                               110 lbs/Acre
N Application Rate:
                               172.48 lbs/Acre
Recommended N App Rate:
                               Buffer Width
                                               Width = 30 \text{ ft.}
                               14.6000003814697
BMP Acres Affected:
                               OUTPUTS
                                  4,829 lbs
N Applied (Field Acres) =
                                  7,571.87 lbs
N Needed (Field Acres) =
    *** N Applied (4829) <= N Needed (7571.87)
    *** Changing N Needed to N Applied...
    *** N Applied =
                                          4,829 lbs
Excess N (Field Acres) =
                                  0 lbs
Excess N Surface =
                                 · 0 lbs
                                  0 lbs
Excess N Subsurface =
                                  4,829 lbs
N Needed Field =
                                  3,621.75 lbs
Utilized N Crop =
                                  1,207.25 lbs
N_Lost After Crop =
                                  1,207.25 lbs
N Lost Before BMP =
N Lost After Cover Crops =
                                  1,207.25 lbs
                                  1,046.65 lbs
N Lost After BMP =
Total N Lost =
                                  1,046.65 lbs
```

Soil Test 0" - 4"

```
PLAT Results For: Halifax 4/_ J12 4:24:30 PM
```

INPUTS Calendar Year: 2012 County: Halifax Producer Identifier: Caledonia Prison Farm Tract Number: 3302-A Field Number: 46 Soil Series: StB: State fine sandy loam, 2 to 6 percent slopes Fescue (Hay) : Crop: BMPs: Buffer Width Width = 30 ft.Fertilizers: Dairy-Lagoon liquid Yearly Applied Amount: 0.75 ac in Lb P205: 77.58 lb All other surface Application Method: applications Soil Loss: 0.15 t/ac/yrReceiving Slope Distance 20-29 ft Soil Test 0" - 4" 148 WV Factor (USER) 1 Hydrologic Condition: GOOD **OUTPUTS** PARTICULATE P

SOLUBLE P = 0

SOLUBLE P = 2

LEACHATE P = 0

SOURCE P = 0

TOTAL P RATING = 2 (LOW)

•

NITROGEN REDUCTIONS/ADDITIONS
Total N Lost (Before) = 1608.75
Total N Lost (After) = 1046.65

REDUCTION = 562.1 lbs N/yr/field

PHOSPHOROUS REDUCTIONS/ADDITIONS
Particulate P (Before) = 0.58
Particulate P (After) = 0.17

REDUCTION = 0.41 lbs P/yr/field

SEDIMENT REDUCTIONS/ADDITIONS
Sediment (Before) = 6.59
Sediment (After) = 6.59

\* ADDITION = 0 t/yr/field \*

NCANAT Version: 2.04 Comparision Results : BEFORE 4/9/2012 4:16:36 PM NLEW Results For: Halifax INPUTS Calendar Year: 2012 Halifax County: Producer Identifier: Caledonia Prison Farm 3302-A Tract Number: Field Number: 47 Soil Series: StB: State fine sandy loam, 2 to 6 percent slopes 34.2 Field Acres: 3 Field Slope: Crop: Fescue (Hay) : Fescue (Hay) NUE: 0.75 3.92 RYE (Database): NFactor (Database): 44 110 lbs/Acre N Application Rate: 172.48 lbs/Acre Recommended N App Rate: OUTPUTS 3,762 lbs N Applied (Field Acres) = 5,898.82 lbs N Needed (Field Acres) = \*\*\* N Applied (3762) <= N Needed (5898.82) \*\*\* Changing N Needed to N Applied ... \*\*\* N Applied = 3,762 lbs 0 lbs Excess N (Field Acres) = Excess N Surface = 0 lbs 0 lbs Excess\_N\_Subsurface = 3,762 lbs N\_Needed\_Field = Utilized N Crop = 2,821.5 lbs 940.5 lbs N Lost After Crop = 940.5 lbs N Lost Before BMP = . N\_Lost\_After\_Cover\_Crops = 940.5 lbs 940.5 lbs Total N Lost = PLAT Results For: Halifax 4/9/2012 4:16:36 PM INPUTS 2012 Calendar Year:

Halifax County: Caledonia Prison Farm Producer Identifier: Tract Number: 3302-A 47 Field Number: StB: State fine sandy loam, 2 to 6 percent slopes Soil Series: Fescue (Hay) : Crop: Layer-Lagoon liquid Fertilizers: 0.75 ac in Yearly Applied Amount: Lb P205: 46.34 lb

Application Method: All other surface applications

Soil Loss:
Receiving Slope Distance

0.12 t/ac/yr 20-29 ft

```
Soil Test 0" - 4"
                               1
   WV Factor (USER)
                               1
Hydrologic Condition:
                               GOOD
                               OUTPUTS
PARTICULATE P
SOLUBLE P
                        2
                        0
LEACHATE P
                        0
SOURCE P
TOTAL P RATING =
                        2 (LOW)
Comparision Results : AFTER
                                          4:16:36 PM
NLEW Results For: Halifax
                              4/9/2012
                               INPUTS
Calendar Year:
                               2012
                               Halifax
County:
Producer Identifier:
                               Caledonia Prison Farm
                               3302-A
Tract Number:
Field Number:
                               47
                               StB: State fine sandy loam, 2 to 6 percent slopes
Soil Series:
                               25.6
Field Acres:
Field Slope:
                               Fescue (Hay) :
Crop:
                               0.75
Fescue (Hay) NUE:
                               3.92
RYE (Database):
NFactor (Database):
                               44
                               110 lbs/Acre
N Application Rate:
                               172.48 lbs/Acre
Recommended N App Rate:
                               Buffer Width
                                                Width = 30 \text{ ft.}
BMPs:
                               8.60000038146973
BMP Acres Affected:
                               OUTPUTS
                                   2,816 lbs
N Applied (Field Acres) =
                                   4,415.49 lbs
N Needed (Field Acres) =
    *** N Applied (2816) <= N Needed (4415.49)
    *** Changing N Needed to N Applied...
                                           2,816 lbs
    *** N Applied =
                                   0 lbs
Excess N (Field Acres) =
Excess N Surface =
                                   0 lbs
                                   0 lbs
Excess_N_Subsurface =
                                   2,816 lbs
N Needed Field =
Utilized N Crop =
                                   2,112 lbs
                                   704 lbs
N Lost After Crop =
                                   704 lbs
N Lost Before BMP =
                                   704 lbs
N Lost After Cover Crops =
N_Lost_After_BMP =
                                   609.4 lbs
                                   609.4 lbs
Total N Lost =
```

```
PLAT Results For: Halifax 4/5 012 4:16:36 PM
```

Sediment (Before) = 3.07 Sediment (After) = 3.07

ADDITION = 0 t/yr/field

\*

INPUTS Calendar Year: 2012 County: Halifax Producer Identifier: Caledonia Prison Farm Tract Number: 3302-A Field Number: 47 Soil Series: StB: State fine sandy loam, 2 to 6 percent slopes Crop: Fescue (Hay): BMPs: Buffer Width Width = 30 ft.Fertilizers: Layer-Lagoon liquid Yearly Applied Amount: 0.75 ac in Lb P205: 46.34 lb Application Method: All other surface applications Soil Loss: 0.12 t/ac/yr Receiving Slope Distance 20-29 ft Soil Test 0" - 4" 148 WV Factor (USER) 1 Hydrologic Condition: GOOD OUTPUTS PARTICULATE P = SOLUBLE P LEACHATE P SOURCE P FOTAL P RATING = 2 (LOW) \*\*\*\*\*\*\*\*\*\*\*\*\* NITROGEN REDUCTIONS/ADDITIONS Total N Lost (Before) = 940.50 Total N Lost (After) = 609.40REDUCTION = 331.1 lbs N/yr/field PHOSPHOROUS REDUCTIONS/ADDITIONS Particulate P (Before) = 0.27 Particulate P (After) = 0.08REDUCTION = 0.19 lbs P/yr/field SEDIMENT REDUCTIONS/ADDITIONS

```
NCANAT Version: 2.04
Comparision Results : BEFORE
                              4/9/2012
NLEW Results For: Halifax
                                       4:20:52 PM
                               INPUTS
Calendar Year:
                               2012
County:
                               Halifax
Producer Identifier:
                               Caledonia Prison Farm
Tract Number:
                               3302-A
Field Number:
                               48
Soil Series:
                               StB: State fine sandy loam, 2 to 6 percent slopes
Field Acres:
                               3
Field Slope:
                               Fescue (Hay) :
Crop:
Fescue (Hay) NUE:
                               0.75
RYE (Database):
                               3.92
NFactor (Database):
                               44
                               110 lbs/Acre
N Application Rate:
Recommended N App Rate:
                               172.48 lbs/Acre
                               OUTPUTS:
                                  1,397 lbs
N Applied (Field Acres) =
                                  2,190.5 lbs
N Needed (Field Acres) =
    *** N Applied (1397) <= N Needed (2190.5)
    *** Changing N Needed to N Applied...
    *** N Applied =
                                          1,397 lbs
                                  0 lbs
Excess N (Field Acres) =
                                  0 lbs
Excess N Surface =
                                  0 lbs
Excess_N_Subsurface =
N Needed Field =
                                  1,397 lbs
Utilized N Crop =
                                  1,047.75 lbs
                                  349.25 lbs
N Lost After Crop =
                                  349.25 lbs
N Lost Before BMP =
                                  349.25 lbs
N Lost After Cover Crops =
Total N Lost =
                                  349.25 lbs
PLAT Results For: Halifax
                              4/9/2012
                                         4:20:52 PM
                               INPUTS
                               2012
Calendar Year:
                               Halifax
County:
                               Caledonia Prison Farm
Producer Identifier:
                               3302-A
Tract Number:
                               48
Field Number:
                               StB: State fine sandy loam, 2 to 6 percent slopes
Soil Series:
                               Fescue (Hay) :
Crop:
                               Layer-Lagoon liquid
Fertilizers:
```

applications 0.12 t/ac/yrSoil Loss: Receiving Slope Distance

20-29 ft

Lb P205:

Yearly Applied Amount:

Application Method:

0.75 ac in 46.34 lb

All other surface

```
1
  WV Factor (USER)
Hydrologic Condition:
                               GOOD
                               OUTPUTS
PARTICULATE P =
SOLUBLE P
                        0
LEACHATE P
SOURCE P
TOTAL P RATING =
                        2 (LOW)
Comparision Results : AFTER
                                         4:20:53 PM
NLEW Results For: Halifax
                              4/9/2012
                               INPUTS
                               2012
Calendar Year:
                               Halifax
County:
                               Caledonia Prison Farm
Producer Identifier:
Tract Number:
                               3302-A
                               48
Field Number:
                               StB: State fine sandy loam, 2 to 6 percent slopes
Soil Series:
                               9.6
Field Acres:
                               3
Field Slope:
                               Fescue (Hay) :
Crop:
                               0.75
Fescue (Hay) NUE:
                               3.92
RYE (Database):
                               44
NFactor (Database):
                               10 lbs/Acre
N Application Rate:
                               172.48 lbs/Acre
Recommended N App Rate:
                               Buffer Width
                                              Width = 30 \text{ ft.}
                               3.20000004768372
BMP Acres Affected:
                               OUTPUTS
                                  96 lbs
N Applied (Field Acres) =
                                  1,655.81 lbs
N Needed (Field Acres) = .
    *** N Applied (96) <= N Needed (1655.81)
    *** Changing N Needed to N Applied...
                                           96 lbs
    *** N Applied =
Excess_N (Field Acres) =
                                  0 lbs
                                  0 lbs
Excess N Surface =
Excess N Subsurface =
                                  0 lbs
                                  96 lbs
N Needed_Field =
                                  72 lbs
Utilized N Crop =
                                  24 lbs
N Lost After Crop =
                                  24 lbs
N Lost Before BMP =
                                  24 lbs
N Lost After Cover_Crops =
N_Lost_After_BMP =
                                  20.8 lbs
                                  20.8 lbs
```

Soil Test 0" - 4"

Total N Lost =

```
PLAT Results For: Halifax
                        4/5, J12 4:20:53 PM
```

INPUTS Calendar Year: 2012 County: Halifax Producer Identifier: Caledonia Prison Farm Tract Number: 3302-A Field Number: 48 Soil Series: StB: State fine sandy loam, 2 to 6 percent slopes Crop: Fescue (Hay) : BMPs: Buffer Width Width = 30 ft. Fertilizers: Layer-Lagoon liquid Yearly Applied Amount: 3 ac in Lb P205: 46.34 lb Application Method: All other surface applications Soil Loss: 0.12 t/ac/yrReceiving Slope Distance 20-29 ft Soil Test 0" - 4" 148 WV Factor (USER) 1 Hydrologic Condition: GOOD OUTPUTS PARTICULATE P 30LUBLE P LEACHATE P SOURCE P FOTAL P RATING = 3 (LOW) \*\*\*\*\*\*\*\*\*\*\*\*\*\* NITROGEN REDUCTIONS/ADDITIONS Total N Lost (Before) = 349.25 Total N Lost (After) REDUCTION = 328.45 lbs N/yr/field PHOSPHOROUS REDUCTIONS/ADDITIONS Particulate P (Before) = 0.10 Particulate P (After) = 0.03REDUCTION = 0.07 lbs P/yr/field

SEDIMENT REDUCTIONS/ADDITIONS Sediment (Before) = 1.15 Sediment (After) = 1.15 ADDITION = 0 t/yr/field

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

```
ICANAT Version: 2.04
Comparision Results : BEFORE
JLEW Results For: Halifax 4/10/2012 8:49:58 AM
                              INPUTS
Calendar Year:
                              2012
                            Halifax
County:
                              Caledonia Prison Farm
?roducer Identifier:
                              3304-B
(ract Number:
                             147
Field Number:
                              StB: State fine sandy loam, 2 to 6 percent slopes
Boil Series:
                              24.8
Field Acres:
                              3
Field Slope:
                              Soybeans (Full Season - Manured) : Conservation Tillage -
.rop:
ninimum residue
Soybeans (Full Season - Manured) NUE:0.25
RYE (Database): 44.1 NFactor (Database): 3.89
                            3.89
N Application Rate:
                             100 lbs/Acre
                             171.55 lbs/Acre
Recommended N App Rate:
                              OUTPUTS
N_Applied (Field Acres) =
N_Needed (Field Acres) =
                                 2,480 lbs
                                 4,254.42 lbs
    *** N Applied (2480) <= N Needed (4254.42)
    *** Changing N Needed to N Applied...
                                         2,480 lbs
    *** N Applied =
Excess N (Field Acres) =
                                 0 lbs
Excess N Surface =
                                 0 lbs
                                 0 lbs
Excess N Subsurface =
                                2,480 lbs
N Needed Field =
                                620 lbs
Utilized N Crop =
                                1,860 lbs
N Lost After Crop =
N_Lost Before BMP =
                                 1,860 lbs
N Lost After Cover Crops =
                                 1,860 lbs
                                 1,860 lbs
Total N Lost =
PLAT Results For: Halifax 4/10/2012 8:49:58 AM
                              INPUTS
                              2012
Calendar Year:
                              Halifax
County:
                              Caledonia Prison Farm
Producer Identifier:
                              3304-B
Tract Number:
```

93.11 lb Lb P205: Application Method: All other surface

Layer-Lagoon sludge

Yearly Applied Amount:

StB: State fine sandy loam, 2 to 6 percent slopes

Soybeans (Full Season - Manured) : Conservation Tillage -

1.85 1000 gal

147

applications

Field Number:

Soil Series:

Fertilizers:

minimum residue

Crop:

```
3
                                  t/ac/yr
Soil Loss:
Receiving Slope Distance
                               2t _9 ft
Soil Test 0" - 4"
                               179
  WV Factor (USER)
                               1.08
Hydrologic Condition:
                               GOOD
                               OUTPUTS
PARTICULATE P
SOLUBLE P
LEACHATE P
                       0
SOURCE P
                      13
                       30 (MEDIUM)
TOTAL P RATING =
Comparision Results : AFTER
                              4/10/2012
                                           8:49:58 AM
NLEW Results For: Halifax
                               INPUTS
                               2012
Calendar Year:
                               Halifax
County:
                               Caledonia Prison Farm
Producer Identifier:
                               3304-B
Tract Number:
                               147
Field Number:
                               StB: State fine sandy loam, 2 to 6 percent slopes
Soil Series:
Field Acres:
                               3
Field Slope:
                               Soybeans (Full Season - Manured) : Conservation Tillage -
Crop:
minimum residue
Soybeans (Full Season - Manured) NUE:0.25
RYE (Database):
                               3.89
NFactor (Database):
                               100 lbs/Acre
N Application Rate:
                               171.55 lbs/Acre
Recommended N App Rate:
                               Buffer Width
                                                Width = 30 \text{ ft.}
BMPs:
                               6.19999980926514
BMP Acres Affected:
                               OUTPUTS
                                  1,860 lbs
N Applied (Field Acres) =
                                  3,190.81 lbs
N Needed (Field Acres) =
    *** N Applied (1860) <= N Needed (3190.81)
    *** Changing N Needed to N Applied...
                                           1,860 lbs
    *** N Applied =
                                  0 lbs
Excess N (Field Acres) =
Excess N Surface =
                                  0 lbs
                                  0 lbs
Excess N Subsurface =
                                  1,860 lbs
N Needed_Field =
                                  465 lbs
Utilized N_Crop =
                                  1,395 lbs
N Lost After Crop =
                                  1,395 lbs
N Lost Before BMP =
                                  1,395 lbs
N Lost_After_Cover_Crops =
```

1,209 lbs

N Lost After BMP =

```
Total_N_Lost =
```

```
PLAT Results For: Halifax 4/10/2012 8:49:58 AM
```

#### INPUTS

Calendar Year: 2012
County: Halifax

Producer Identifier: Caledonia Prison Farm

Tract Number: 3304-B Field Number: 147

Soil Series: StB: State fine sandy loam, 2 to 6 percent slopes

Crop: Soybeans (Full Season - Manured): Conservation Tillage -

minimum residue
BMPs:
Buffer Width Width = 30 ft.

Fertilizers: Layer-Lagoon sludge

Yearly Applied Amount: 1.85 1000 gal

Lb P205: 93.11 lb

Application Method: All other surface

applications
Soil Loss:
3.4 t/ac/yr

Receiving Slope Distance 20-29 ft
Soil Test 0" - 4" 179
WV\_Factor (USER) 1.08

Hydrologic Condition: GOOD

#### OUTPUTS

PARTICULATE P = 3

SOLUBLE P = 9

LEACHATE P = 0

SOURCE P = 10

TOTAL P RATING = 22 (LOW)

\*\*\*\*\*\*\*\*\*\*

NITROGEN REDUCTIONS/ADDITIONS
Total N Lost (Before) = 1860.00

Total N Lost (After) = 1209.00

REDUCTION = 651 lbs N/yr/field

PHOSPHOROUS REDUCTIONS/ADDITIONS
Particulate P (Before) = 6.23

Particulate P (After) = 1.87

REDUCTION = 4.36 lbs P/yr/field

SEDIMENT REDUCTIONS/ADDITIONS

Sediment (Before) = 63.24

Sediment (After) = 63.24

ADDITION =  $0 \pm /vr/field$ 

NCANAT Version: 2.04 Comparision Results : BEFORE NLEW Results For: Halifax 4/9/2012 5:05:40 PM INPUTS 2012 Calendar Year: Halifax County: Caledonia Prison Farm Producer Identifier: 3304-B Tract Number: 164 Field Number: StB: State fine sandy loam, 2 to 6 percent slopes Soil Series: 36.2 Field Acres: 4 Field Slope: Fescue (Hay) : Crop: 0.75 Fescue (Hay) NUE: 3.92 RYE (Database): 44 NFactor (Database): 110 lbs/Acre N Application Rate: 172.48 lbs/Acre Recommended N App Rate: OUTPUTS 3,982 lbs N Applied (Field Acres) = 6,243.78 lbs N Needed (Field Acres) = \*\*\* N Applied (3982) <= N Needed (6243.78) \*\*\* Changing N Needed to N Applied... 3,982 lbs \*\*\* N Applied = 0 lbs Excess N (Field Acres) = 0 lbs Excess N Surface = 0 lbs Excess N Subsurface = 3,982 lbs N Needed Field = 2,986.5 lbs Utilized N Crop = 995.5 lbs N Lost After Crop = N Lost Before BMP = 995.5 lbs 995.5 lbs N Lost After Cover Crops = 995.5 lbs Total N Lost = PLAT Results For: Halifax 4/9/2012 5:05:40 PM INPUTS 2012 Calendar Year: Halifax County: Producer Identifier: Caledonia Prison Farm 3304-B Tract Number: 164 Field Number: StB: State fine sandy loam, 2 to 6 percent slopes Soil Series: Fescue (Hay) : Crop:

applications Soil Loss:

Fertilizers:

0.12 t/ac/yr--- Diatonas

20-29 ft

Layer-Lagoon liquid

Lb P205:

Yearly Applied Amount:

Application Method:

0.75 ac in

All other surface

46.34 lb

```
Soil Test 0" - 4"
  WV_Factor (USER)
                               GOOD
Hydrologic Condition:
                               OUTPUTS
PARTICULATE P
SOLUBLE P
                        0
LEACHATE P
                        0
SOURCE P
                        2 (LOW)
TOTAL P RATING =
Comparision Results : AFTER
                                          5:05:40 PM
NLEW Results For: Halifax 4/9/2012
                               INPUTS
                               2012
Calendar Year:
                               Halifax
County:
                               Caledonia Prison Farm
Producer Identifier:
                                3304-B
Tract Number:
                                164
Field Number:
                                StB: State fine sandy loam, 2 to 6 percent slopes
Soil Series:
                                27.2
Field Acres:
Field Slope:
                                Fescue (Hay) :
Crop:
                                0.75
Fescue (Hay) NUE:
                                3.92
RYE (Database):
                                44
NFactor (Database):
                                110 lbs/Acre
N Application Rate:
                                172.48 lbs/Acre
Recommended N App Rate:
                                                Width = 30 ft.
                                Buffer Width
BMPs:
BMP Acres Affected:
                                OUTPUTS
                                   2,992 lbs
N Applied (Field Acres) =
                                   4,691.46 lbs
N Needed (Field Acres) =
     *** N Applied (2992) <= N Needed (4691.46)
     *** Changing N Needed to N Applied...
                                            2,992 lbs
     *** N Applied =
                                   0 lbs
 Excess N (Field Acres) =
                                   0 lbs
 Excess N Surface =
                                   0 lbs
 Excess_N_Subsurface =
                                   2,992 lbs
 N Needed Field =
                                   2,244 lbs
 Utilized N Crop =
                                   748 lbs
 N Lost After Crop =
                                    748 lbs
 N Lost Before BMP =
                                   748 lbs
 N_Lost_After Cover Crops =
                                    649 lbs
 N_Lost_After_BMP =
```

Total N Lost = 649 lbs

PLAT Results For: Halifax 4/5 .012 5:05:40 PM

INPUTS

Calendar Year: 2012
County: Halifax

Producer Identifier: Caledonia Prison Farm

Tract Number: 3304-B Field Number: 164

Soil Series: StB: State fine sandy loam, 2 to 6 percent slopes

Crop: Fescue (Hay):

BMPs: Buffer Width Width = 30 ft.

Fertilizers: Layer-Lagoon liquid

Yearly Applied Amount: 0.75 ac in Lb P205: 46.34 lb

Application Method: All other surface

applications
Soil Loss:

Receiving Slope Distance 2

Soil Test 0" - 4"

WV\_Factor (USER)
Hydrologic Condition:

0.12 t/ac/yr 20-29 ft

148 1

GOOD

OUTPUTS

PARTICULATE P = 0

SOLUBLE P = 2

LEACHATE P' = 0

SOURCE P = 0

TOTAL P RATING = 2 (LOW)

\*\*\*\*\*\*\*\*\*\*

NITROGEN REDUCTIONS/ADDITIONS Total N Lost (Before) = 995.50 Total N Lost (After) = 649.00

REDUCTION = 346.5 lbs N/yr/field

PHOSPHOROUS REDUCTIONS/ADDITIONS
Particulate P (Before) = 0.29

Particulate P (After) = 0.09

REDUCTION = 0.2 lbs P/yr/field

SEDIMENT REDUCTIONS/ADDITIONS

Sediment (Before) = 3.26

Sediment (After) = 3.26

ADDITION = 0 t/yr/field \*

NCANAT Version: 2.04 Comparision Results : BEFORE NLEW Results For: Halifax 4/9/2012 5:02:20 PM INPUTS 2012 Calendar Year: Halifax County: Caledonia Prison Farm Producer Identifier: 3304-B Tract Number: 172 Field Number: .StB: State fine sandy loam, 2 to 6 percent slopes Soil Series: 13.5 Field Acres: 3 Field Slope: Fescue (Hay) : Crop: 0.75 Fescue (Hay) NUE: 3.92 RYE (Database): 44 NFactor (Database): 110 lbs/Acre N Application Rate: 172.48 lbs/Acre Recommended N App Rate: **OUTPUTS** N Applied (Field Acres) = 1,485 lbs 2,328.48 lbs N Needed (Field Acres) = \*\*\* N Applied (1485) <= N Needed (2328.48) \*\*\* Changing N Needed to N Applied... 1,485 lbs \*\*\* N Applied = 0 lbs Excess N (Field Acres) = o lbs 1,485 lbs 1,113.75 371 0 lbs Excess N Surface = Excess N Subsurface = N Needed Field = 1,113.75 lbs Utilized N Crop = 371.25 lbs N Lost After Crop = 371.25 lbs N Lost Before BMP = 371.25 lbs N\_Lost\_After\_Cover\_Crops = ... 371.25 lbs Total N Lost =

PLAT Results For: Halifax 4/9/2012 5:02:20 PM

#### INPUTS

2012 Calendar Year: Halifax County: Producer Identifier: Caledonia Prison Farm

3304-B Tract Number: 172 Field Number:

StB: State fine sandy loam, 2 to 6 percent slopes Soil Series:

Fescue (Hay) : Crop:

Layer-Lagoon liquid Fertilizers: 0.75 ac in Yearly Applied Amount: 46.34 lb

Lb P205: All other surface Application Method:

applications 0.11 t/ac/yrSoil Loss:

ama Diatango 20-29 ft

```
Soil Test 0" - 4"
   WV Factor (USER)
Hydrologic Condition:
                               GOOD
                               OUTPUTS
PARTICULATE P
SOLUBLE P
                        2
LEACHATE P
                        0.
SOURCE P
                        0
TOTAL P RATING =
                        2 (LOW)
<u>Comparision Results</u> : AFTER
NLEW Results For: Halifax
                              4/9/2012
                                          5:02:20 PM
                               INPUTS
Calendar Year:
                               2012
County:
                               Halifax
Producer Identifier:
                               Caledonia Prison Farm
Fract Number:
                               3304-B
Field Number:
                               172
                               StB: State fine sandy loam, 2 to 6 percent slopes
Soil Series:
Field Acres:
                               10.1
Field Slope:
                               3
Crop:
                               Fescue (Hay) :
                               0.75
Fescue (Hay) NUE:
                               3.92
RYE (Database):
NFactor (Database):
                               44
N Application Rate:
                               110 lbs/Acre
                               172.48 lbs/Acre
Recommended N App Rate:
                               Buffer Width Width = 30 ft.
3MPs:
3MP Acres Affected:
                               3.40000009536743
                               OUTPUTS
                                  1,111 lbs
N Applied (Field Acres) =
Needed (Field Acres) =
                                  1,742.05 lbs
    *** N Applied (1111) <= N Needed (1742.05)
    *** Changing N Needed to N Applied...
    *** N Applied =
                                           1,111 lbs
Excess N (Field Acres) =
                                  0 lbs
Excess N Surface =
                                  0 lbs
Excess N Subsurface =
                                  0 lbs
Needed Field =
                                  1,111 lbs
Jtilized_N_Crop =
                                  833.25 lbs
1 Lost After Crop =
                                  277.75 lbs
1 Lost Before BMP =
                                  277.75 lbs
                                  277.75 lbs
1 Lost After Cover Crops =
1 Lost After BMP =
                                  240.35 lbs
```

240.35 lbs

!otal N Lost =

```
5:02:20 PM
```

Sediment (After) = 1.11

\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ADDITION = 0 t/yr/field

PLAT Results For: Halifax 4/5 .012 INPUTS Calendar Year: 2012 County: Halifax Producer Identifier: Caledonia Prison Farm Tract Number: 3304-B Field Number: 172 Soil Series: StB: State fine sandy loam, 2 to 6 percent slopes Crop: Fescue (Hay) : BMPs: Buffer Width Width = 30 ft.Fertilizers: Layer-Lagoon liquid Yearly Applied Amount: 0.75 ac in Lb P205: 46.34 lb Application Method: All other surface applications Soil Loss: 0.11 t/ac/yrReceiving Slope Distance -20-29 ft Soil Test 0" - 4" 148 WV Factor (USER) 1 Hydrologic Condition: GOOD **OUTPUTS** PARTICULATE P = SOLUBLE P 2 LEACHATE P 0 30URCE P TOTAL P RATING = 2 (LOW) NITROGEN REDUCTIONS/ADDITIONS Total N Lost (Before) = 371.25 Total N Lost (After) = 240.35 REDUCTION = 130.9 lbs N/yr/field PHOSPHOROUS REDUCTIONS/ADDITIONS Particulate P (Before) = 0.10 Particulate P (After) = 0.03REDUCTION = 0.07 lbs P/yr/field SEDIMENT REDUCTIONS/ADDITIONS Sediment (Before) = 1.11

NCANAT Version: 2.04

Comparision Results : BEFORE

4/10/2012 8:53:35 AM NLEW Results For: Halifax

INPUTS

Calendar Year:

2012

County:

Halifax

Producer Identifier:

Caledonia Prison Farm

Tract Number:

3304-B

Field Number:

189 StB: State fine sandy loam, 2 to 6 percent slopes

Soil Series: Field Acres:

31.5

Field Slope:

3

Crop:

Soybeans (Full Season - Manured) : Conservation Tillage -

minimum residue

Soybeans (Full Season - Manured) NUE:0.25

RYE (Database):

44.1

NFactor (Database):

3.89

N Application Rate:

100 lbs/Acre

Recommended N App Rate:

171.55 lbs/Acre

#### OUTPUTS

N Applied (Field Acres) = N Needed (Field Acres) =

3,150 lbs 5,403.79 lbs

\*\*\* N Applied (3150) <= N Needed (5403.79)

\*\*\* Changing N Needed to N Applied...

\*\*\* N Applied =

3,150 lbs

Excess N (Field Acres) =

0 lbs 0 lbs

Excess N Surface =

0 lbs

Excess\_N\_Subsurface = N Needed Field =

3,150 lbs 787.5 lbs

Utilized N Crop =

2,362.5 lbs

N Lost After Crop =

N Lost Before BMP =

2,362.5 lbs

N\_Lost\_After\_Cover\_Crops =

2,362.5 lbs

Total N Lost =

2,362.5 lbs

4/10/2012 8:53:35 AM PLAT Results For: Halifax

#### INPUTS

Calendar Year:

2012

County:

Halifax

Producer Identifier:

Caledonia Prison Farm

Tract Number:

3304-B

Field Number:

189

Soil Series:

StB: State fine sandy loam, 2 to 6 percent slopes

Crop:

Soybeans (Full Season - Manured) : Conservation Tillage -

minimum residue Fertilizers:

Layer-Lagoon sludge

Yearly Applied Amount:

1.85 1000 gal

Lb P205:

93.11 lb All other surface

Application Method:

```
2t .9 ft
Receiving Slope Distance
                               57
Soil Test 0" - 4"
                               1.13
  WV Factor (USER)
                               GOOD
Hydrologic Condition:
                               OUTPUTS
PARTICULATE P
                        3
SOLUBLE P
                        0
LEACHATE P
                       13
SOURCE P
TOTAL P RATING =
                       18 (LOW)
Comparision Results : AFTER
                              4/10/2012
                                           8:53:36 AM
NLEW Results For: Halifax
                                INPUTS
                                2012
Calendar Year:
                               Halifax
County:
                                Caledonia Prison Farm
Producer Identifier:
                                3304-B
Tract Number:
                                189
Field Number:
                                StB: State fine sandy loam, 2 to 6 percent slopes
Soil Series:
                                23.6
Field Acres:
Field Slope:
                                Soybeans (Full Season - Manured) : Conservation Tillage -
Crop:
minimum residue
Soybeans (Full Season - Manured) NUE:0.25
                                44.1
RYE (Database):
                                3.89
NFactor (Database):
                                100 lbs/Acre
N Application Rate:
                                171.55 lbs/Acre
Recommended N App Rate:
                                                 Width = 30 \text{ ft.}
                                Buffer Width
BMPs:
                                7.90000009536743
BMP Acres Affected:
                                OUTPUTS
                                   2,360 lbs
N Applied (Field Acres) =
                                   4,048.56 lbs
N Needed (Field Acres) =
     *** N Applied (2360) <= N Needed (4048.56)
     *** Changing N_Needed to N Applied...
                                            2,360 lbs
     *** N Applied =
                                   0 lbs
 Excess N (Field Acres) =
 Excess N Surface =
                                   0 lbs
                                   0 lbs
 Excess N Subsurface =
                                   2,360 lbs
 N Needed Field =
                                   590 lbs
 Utilized N Crop =
                                   1,770 lbs
 N Lost After Crop =
                                   1,770 lbs
 N_Lost Before BMP =
                                   1,770 lbs
 N_Lost_After_Cover_Crops =
                                    1,533 lbs
```

2

Soil Loss:

N Lost After\_BMP =

t/ac/yr

PLAT Results For: Halifax 4/10/2012 8:53:36 AM

INPUTS

Calendar Year: 2012

County: Halifax

Producer Identifier: Caledonia Prison Farm

Tract Number: 3304-B Field Number: 189

Soil Series: StB: State fine sandy loam, 2 to 6 percent slopes

Crop: Soybeans (Full Season - Manured) : Conservation Tillage -

minimum residue

BMPs: Buffer Width Width = 30 ft.

Fertilizers: Layer-Lagoon sludge
Yearly Applied Amount: 1.85 1000 gal

Lb P205: 93.11 lb

Application Method: All other surface

applications
Soil Loss: 2.5 t/ac/yr

Receiving Slope Distance 20-29 ft
Soil Test 0" - 4" 57
WV Factor (USER) 1.13

WV\_Factor (USER) 1.13 Hydrologic Condition: GOOD

OUTPUTS

PARTICULATE P = 1

SOLUBLE P = 3

LEACHATE P = 0

SOURCE P = 10

 $\overline{\text{TOTAL P RATING}} = 14 \text{ (LOW)}$ 

\*\*\*\*\*\*\*\*\*\*

NITROGEN REDUCTIONS/ADDITIONS
Total N Lost (Before) = 2362.50
Total N Lost (After) = 1533.00

REDUCTION = 829.5 lbs N/yr/field

PHOSPHOROUS REDUCTIONS/ADDITIONS
Particulate P (Before) = 1.77

Particulate P (After) = 0.53

REDUCTION = 1.24 lbs P/yr/field

SEDIMENT REDUCTIONS/ADDITIONS

Sediment (Before) = 59.00

Sediment (After) = 59.00

-------

```
JCANAT Version: 2.04
Comparision Results : BEFORE
NLEW Results For: Halifax
                             4/10/2012
                                         8:42:59 AM
                              INPUTS
                              2012
Calendar Year:
                              Halifax
County:
?roducer Identifier:
                              Caledonia Prison Farm
[ract Number:
                              3304-B
Field Number:
                              190
                              StA: State fine sandy loam, 0 to 2 percent slopes
Boil Series:
Field Acres:
Field Slope:
                              Soybeans (Full Season - Manured) : Conservation Tillage -
lrop:
minimum residue
3oybeans (Full Season - Manured) NUE:0.25
RYE (Database):
JFactor (Database):
                             3.89
                             100 lbs/Acre
Application Rate:
                             175.05 lbs/Acre
Recommended N App Rate:
                              OUTPUTS
\_Applied (Field Acres) =
\_Needed (Field Acres) =
                                 1,770 lbs
                               3,098.39 lbs
   *** N Applied (1770) <= N Needed (3098.39)
    *** Changing N Needed to N Applied...
                                          1,770 lbs
   *** N Applied =
Excess N (Field Acres) =
                                 0 lbs
Excess N Surface =
                                 0 lbs
Excess N Subsurface =
                                 0 lbs
Needed Field =
                                1,770 lbs
                                 442.5 lbs
Jtilized N Crop =
                                 1,327.5 lbs
N Lost After Crop =
\_Lost Before BMP =
                                 1,327.5 lbs
                                 1,327.5 lbs
1 Lost After Cover Crops =
                                 1,327.5 lbs
fotal N Lost =
PLAT Results For: Halifax 4/10/2012 8:42:59 AM
                              INPUTS
                              2012
Calendar Year:
                              Halifax
County:
                              Caledonia Prison Farm
?roducer Identifier:
                              3304-B
Fract Number:
Field Number:
                              190
```

ninimum residue

Fertilizers: Swine-Lagoon sludge

Yearly Applied Amount: 1.85 1000 ga

Yearly Applied Amount: 1.85 1000 gal

StA: State fine sandy loam, 0 to 2 percent slopes

Soybeans (Full Season - Manured) : Conservation Tillage -

Lb P205: 49.67 lb

Application Method: All other surface

applications

Soil Series:

Crop:

```
Soil Loss:
                                  t/ac/yr
Receiving Slope Distance
                               2t .9 ft
Soil Test 0" - 4"
                              66
  WV Factor (USER)
                              1.11
Hydrologic Condition:
                              GOOD
                              OUTPUTS
PARTICULATE P =
SOLUBLE P
LEACHATE P
                       0
SOURCE P
                       6
TOTAL P RATING =
                      10 (LOW)
Comparision Results : AFTER
                             4/10/2012
                                          8:43:00 AM
NLEW Results For: Halifax
                               INPUTS
Calendar Year:
                               2012
                              Halifax
County:
                              Caledonia Prison Farm
Producer Identifier:
Tract Number:
                               3304-B
Field Number:
                               190
                               StA: State fine sandy loam, 0 to 2 percent slopes
Soil Series:
                               13.3
Field Acres:
Field Slope:
                               Soybeans (Full Season - Manured) : Conservation Tillage -
Crop:
minimum residue
Soybeans (Full Season - Manured) NUE:0.25
RYE (Database):
NFactor (Database):
                               3.89
                             100 lbs/Acre
N Application Rate:
                              175.05 lbs/Acre
Recommended N App Rate:
                                               Width = 30 \text{ ft.}
                              Buffer Width
BMPs:
                               4.40000009536743
BMP Acres Affected:
                               OUTPUTS
                                  1,330 lbs
N Applied (Field Acres) =
N_Needed (Field Acres) =
                                  2,328.17 lbs
    *** N Applied (1330) <= N Needed (2328.17)
    *** Changing N Needed to N Applied...
                                          1,330 lbs
    *** N Applied =
Excess N (Field Acres) =
                                  0 lbs
Excess N Surface =
                                  0 lbs
                                  0 lbs
Excess_N_Subsurface =
                                  1,330 lbs
N Needed Field =
                                  332.5 lbs
Utilized N Crop =
                                  997.5 lbs
N Lost After Crop =
N Lost Before BMP =
                                  997.5 lbs
N Lost After Cover Crops =
                                  997.5 lbs
                                  865.5 lbs
```

N Lost After\_BMP =

```
Total_N_Lost = . 365.5 lbs
```

PLAT Results For: Halifax 4/10/2012 8:43:00 AM INPUTS Calendar Year: 2012 County: Halifax Producer Identifier: Caledonia Prison Farm Tract Number: 3304-B Field Number: 190 Soil Series: StA: State fine sandy loam, 0 to 2 percent slopes Crop: Soybeans (Full Season - Manured) : Conservation Tillage minimum residue BMPs: Buffer Width Width = 30 ft.Fertilizers: Swine-Lagoon sludge Yearly Applied Amount: 1.85 1000 gal Lb P205: 49.67 lb Application Method: All other surface applications Soil Loss: 1.6 t/ac/yr Receiving Slope Distance 20-29 ft Soil Test 0" - 4" 66 WV Factor (USER) 1.11 Hydrologic Condition: GOOD OUTPUTS PARTICULATE P 3 SOLUBLE P 0 LEACHATE P SOURCE P **FOTAL P RATING =** 8 (LOW) \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* NITROGEN REDUCTIONS/ADDITIONS Total N Lost (Before) = 1327.50 Total N Lost (After) = 865.50 REDUCTION = 462 lbs N/yr/field PHOSPHOROUS REDUCTIONS/ADDITIONS

REDUCTION = 0.53 lbs P/yr/field \*

\*

SEDIMENT REDUCTIONS/ADDITIONS \*

Sediment (Before) = 21.28 \*

Sediment (After) = 21.28 \*

ADDITION = 0 t/yr/field \*

Particulate P (Before) = 0.75 Particulate P (After) = 0.23

```
NCANAT Version: 2.04
Comparision Results : BEFORE
NLEW Results For: Halifax 4/10/2012 8:46:33 AM
                               INPUTS
Calendar Year:
                               2012
County:
                              Halifax
Producer Identifier:
                              Caledonia Prison Farm
Tract Number:
                              3304-B
Field Number:
                              192
Soil Series:
                              StB: State fine sandy loam, 2 to 6 percent slopes
Field Acres:
                              18.3
Field Slope:
Crop:
                              Soybeans (Full Season - Manured) : Conservation Tillage -
minimum residue
Soybeans (Full Season - Manured) NUE:0.25
RYE (Database):
                           3.89
NFactor (Database):
N Application Rate:
                              100 lbs/Acre
Recommended N App Rate:
                             171.55 lbs/Acre
                              OUTPUTS
N_Applied (Field Acres) =
N_Needed (Field Acres) =
                                 1,830 lbs
                                 3,139.35 lbs
    *** N Applied (1830) <= N Needed (3139.35)
    *** Changing N Needed to N Applied...
    *** N Applied =
                                          1,830 lbs
Excess N (Field Acres) =
                                 0 lbs
Excess N Surface =
                                 0 lbs
Excess N Subsurface =
                                 0 lbs
N Needed Field =
                                1,830 lbs
Utilized N Crop =
                               457.5 lbs
                               1,372.5 lbs
N Lost After Crop =
N Lost Before BMP =
                                 1,372.5 lbs
N Lost After Cover Crops =
                                 1,372.5 lbs
Fotal N Lost =
                                 1,372.5 lbs
PLAT Results For: Halifax
                             4/10/2012 8:46:33 AM
                              INPUTS
Calendar Year:
                              2012
County:
                              Halifax
Producer Identifier:
                              Caledonia Prison Farm
Fract Number:
                              3304-B
Field Number:
                              192
                              StB: State fine sandy loam, 2 to 6 percent slopes
Soil Series:
                              Soybeans (Full Season - Manured) : Conservation Tillage -
```

Layer-Lagoon sludge

Lb P205:

Yearly Applied Amount:

Application Method:

1.85 1000 gal

All other surface

93.11 lb

applications

ninimum residue Fertilizers:

```
t/ac/yr
Soil Loss:
Receiving Slope Distance
                              2t 9 ft
Soil Test 0" - 4"
                              131
                              1.13
  WV Factor (USER)
                              GOOD
Hydrologic Condition:
                              OUTPUTS
PARTICULATE P
SOLUBLE P
LEACHATE P
                      13
SOURCE P
TOTAL P RATING =
                      22 (LOW)
Comparision Results : AFTER
                                        8:46:33 AM
NLEW Results For: Halifax
                             4/10/2012
                              INPUTS
Calendar Year:
                              2012
                              Halifax
County:
                              Caledonia Prison Farm
Producer Identifier:
                              3304-B
Tract Number:
                              192
Field Number:
                              StB: State fine sandy loam, 2 to 6 percent slopes
Soil Series:
                              13.7
Field Acres:
Field Slope:
                              Soybeans (Full Season - Manured) : Conservation Tillage -
Crop:
minimum residue
Soybeans (Full Season - Manured) NUE:0.25
                              44.1
RYE (Database):
                              3.89
NFactor (Database):
                              100 lbs/Acre
N Application Rate:
                              171.55 lbs/Acre
Recommended N App Rate:
                                             Width = 30 \text{ ft.}
                              Buffer Width
BMPs:
                              4.59999990463257
BMP Acres Affected:
                              OUTPUTS
N_Applied (Field Acres) =
                                 1,370 lbs
                                 2,350.22 lbs
N Needed (Field Acres) =
    *** N Applied (1370) <= N Needed (2350.22)
    *** Changing N_Needed to N Applied...
                                          1,370 lbs
    *** N Applied =
                                  0 lbs
Excess_N (Field Acres) =
                                  0 lbs
Excess N Surface =
Excess_N_Subsurface =
                                 0 lbs
                                 1,370 lbs
N Needed Field =
                                 342.5 lbs
Utilized N Crop =
                                 1,027.5 lbs
N Lost After Crop =
                                 1,027.5 lbs
N Lost Before BMP =
N Lost After Cover Crops =
                                 1,027.5 lbs
```

889.5 lbs

N Lost After BMP =

```
Total_N_Lost =
```

### ₹89.5 lbs

·						
PLAT Results For: Ha	lifax	4/10/2012	8:46:33 AM			
	•	INPUTS				-
Calendar Year: County: Producer Identifier: Tract Number: Field Number: Soil Series: Crop: minimum residue BMPs: Fertilizers:		3304-B 192 StB: State Soybeans (		anured) : Con	cent slopes servation Ti	llage
referrizers.		Lb P2C	Applied Amount:	1.85 1000 93.11 lb All other		
applications Soil Loss: Receiving Slope Distar Soil Test O" - 4" WV_Factor (USER) Hydrologic Condition:	nce	1.6 t/ac/y 20-29 ft 131 1.13 GOOD		AII Other	SULTACE	
		OUTPUTS		•		-
PARTICULATE P =	1					
SOLUBLE P =	6				•	
LEACHATE P =	0					
SOURCE P =	10					
OTAL P RATING =	17 (LOW)	<del>.</del>				
NITROGEN REDU Total N Lost (Be Total N Lost (Af  REDUCTION = 48  PHOSPHOROUS REDU	CTIONS/A fore) = ter) = 3 lbs N/	DDITIONS 1372.50 889.50 yr/field	***  *  *  *  *  *  *  *  *  *  *  *  *			
Particulate P Particulate P	(Before)	= 1.51	* *			

ADDITION = 0 + /vr/field

REDUCTION = 1.06 lbs P/yr/field

SEDIMENT REDUCTIONS/ADDITIONS
Sediment (Before) = 21.92
Sediment (After) = 21.92

# THIS DESIGN IS FOR A SINGLE STAGE LAGOON (LAYER)

CLIENTS NAME ====================================	SEPTEMBER 23, 1996  > 500 FEET
TREATMENT VOLUME ========> (minimum 2.5 cu. ft. per lb SSLW) NUMBER OF YEARS OF SLUDGE ACCUMULATION >	2.5 0.0 YEARS
(minimum depth without sludge = 6 feet) (minimum depth with sludge = 8 feet) SIDE SLOPES ====================================	48.9 FEET 41.2 FEET 41.2 FEET .7 feet
ADDITIONAL DRAINAGE AREA IN SQUARE FEET> (i.e. pumpout pond & other outside area) LENGTH OF PUMPING CYCLE ========>> GALLONS OF FRESH WATER ADDED DAILY ===>> EXCESS RAINFALL ABOVE EVAPORATION ====>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	180 DAYS 780 GALLONS (EXCESS WATER) 7.6 INCHES 6.6 INCHES
Inside Dimensions of Lagoon at Top of Day Length = 350.6 feet Width = 185  Begin Pumping Elevation = 51	.0 feet  .6 feet  .7 feet .9 feet
	896,665

=

TOTAL STEADY STATE LIVE WEIGHT (SSLW) = 240000 lbs

2. SLUDGE ACCUMULATION

Sludge accumulates at the rate of 0.825 cu. ft. per year per pound of STEADY STATE LIVE WEIGHT in layers.

Years of sludge accumulation in design? 0.0

Sludge Volume = D

cubic feet

3. REQUIRED LIQUID VOLUME OF LAGOON

Design for 2.5 cu. ft. per pound SSLW

Total Volume = (SSLW \* Design factor) + Sludge Volume

Total Volume = ERROR cubic feet

4. NORMAL LAGOON LIQUID LEVEL

Maintain normal lagoon liquid level at elevation 48.9 feet Construct lagoon bottom elevation 41.2 feet

Lagoon size for normal lagoon liquid volume using prismodial formula

SS/END1 SS/END2 SS/SIDE1 SS/SIDE2 DEPTH 3.0 3.0 3.0 7.7

AREA OF TOP

LENGTH \* WIDTH =

320.0 155.0

49600.0 (AREA OF TOP)

AREA OF BOTTOM

Lb \* Wb

273.8 108.8

29789.4 (AREA OF BOTTOM)

AREA OF MIDSECTION

(Lm \* Wm)

296.9 131.9

39161.1 (AREA OF MIDSECTION)

CU. YD. = [AREA TOP + (4\*AREA MIDSECTION) + AREA BOTTOM] \* DEPTH/6 49600.0 156644.4 29789.4 1.283

VOLUME OF LAGOON AT NORMAL LAGOON LIQUID LEVEL = 302910.1 CU. FT. VOLUME NEEDED = ERROR CU. FT.

THE SURFACE DIMENSIONS OF THE LAGOON AT NORMAL LIQUID LEVEL ARE 320.0 FEET LONG BY 155.0 FEET WIDE

Place spoil as a continuous dike to elevation

54.0 feet.

. TEMPORARY STORAGE REQUIRED

DRAINAGE AREA:

Lagoon (top of dike)

Length \* Width 350.6 185.6

65071 square feet

Additional Drainage Area

53477 square feet

TOTAL DA

118548 square feet

Pumping cycle to be

180 days.

6A. Volume of waste produced

Volume = 240000 SSLW \* 0.008 gallon/lb. SSLW/day \* 180 days in the pumping cycle / 7.48 gallons per cu. ft.

Volume = 46203.2 cubic feet

6B. Volume of excess water.

This is the amount of excess water usage (see tech. guide 633-83)

Volume = 780 gallons/day \* 180 days in the pumping cycle divided by 7.48 gallons per cu. ft.

Volume = 18770.1 cubic feet

6C. Volume of rainfall in excess of evaporation

Use period of time when rainfall exceeds evaporation by largest amount.

Excess rainfall (difference) = 7.6 inches

Volume = 7.6 inches \* DA / 12 inches per foot

Volume = 74685.5 cubic feet

6D. Volume of 25 year - 24 hour storm

Volume = 6.6 inches \* DA / 12 inches per foot

Volume = 65201.6 cubic feet

TOTAL REQUIRED TEMPORARY STORAGE

6A. 46203.2 cubic feet

6B. 18770.1 cubic feet

6C. 74685.5 cubic feet

6D. 65201.6 cubic feet

TOTAL TEMPORARY STORAGE 204860.3 cubic feet

DEPTH OF STORAGE REQUIRED (ABOVE NORMAL LIQUID ELEVATION OF LAGOON)

Depth required = Volume of temporary storage divided by surface area of lagoon.

49600 sq. ft. cu. ft. / 204860 Depth required = 4.1 feet Depth required =

48.9 feet Normal lagoon liquid elevation = 4.1 feet Depth required 1.0 feet 54.0 feet Freeboard Top of Dam

THE DIMENSIONS OF THE INSIDE EDGE OF THE DAM AT ELEVATION 54.0 FEET BY 350.6 ARE

#### SET BEGIN PUMPING ELEVATION 8.

PUMPED STORAGE VOLUME

46203.2 cubic feet 6A. 18770.1 cubic feet 6B. 74685.5 cubic feet 6C.

139658.7 cubic feet TOTAL PUMPED VOLUME =

Depth required = Volume of pumped storage divided by surface area of lagoon at normal water level.

49600 sq. ft. 139658.7 cu. ft. / Depth required = 2.8 feet Depth required =

: Jay G. Sherrood 10/7/96 DESIGNED BY:

APPROVED BY: JOY O Shorred

DATE: 10/7/96

DATE:

Farm Name:

CALEDONIA LAGOON #1

HALIFAX County: PITTEAX

Date:

SEPTEMBER 23, 1996

1. top 49.04 (100x121)

PRISMODIAL FORMULA

Length =

96

Width =

Depth =

8.1

Side Slope(ft/ft)=

Volume in Cubic Yards =

X

17.17 Top =

11232 sq. ft.

Mid =

9572.31 sq. ft.

87.9 lin. ft.

108.9 lin. ft.

Bottom =

8043.84 sq. ft.

79.8 lin. ft. X

100.8 lin. ft.

Prepared By: J P SHERROD

Farm Name: CALEDONIA LAGOON #2

County: PITTFAX

Date:

SEPTEMBER 23, 1996

41,210

N. top 4858 (317 x 130 PRISMODIAL FORMULA

Length = 314

Width =

Depth =

8.6

Side Slope(ft/ft)=

Volume in Cubic Yards = 11525.28

39878 sq. ft.

Mid = 36159.36 sq. ft.

305.4 lin. ft. X

118.4 lin. ft.

ASK Bottom = 32588.64 sq. ft.

296.8 lin. ft. X

109.8 lin. ft.

Prepared By: J P SHERROD